

Assessment on Water, Sanitation, and Hygiene (WASH) Practices in Heracleo Casco Memorial National High School: Basis for Strategic Plan

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Abstract: *This study aimed to assess the water, sanitation, and hygiene (WASH) practices in Heracleo Casco Memorial National High School (HCMNHS) and develop a strategic plan for improvement. A mixed-methods approach was used, including surveys, interviews, and observation. The results showed that most students in Heracleo Casco Memorial National High School knew about water access, sanitation facilities, and good hygiene practices. However, the school needs to ensure that all students have access to proper sanitation facilities and waste management systems. It is also important to implement education programs that will promote good hygiene practices and prevent the spread of illnesses and infections. This study provides valuable information on the WASH practices in HCMNHS and can serve as a guide for other educational institutions in improving their WASH practices.*

Keywords: Water, Sanitation, Hygiene

1. Introduction

Sustainable Development Goal 6 (SDG-6) emphasizes on access to safe water and improving sanitation and hygiene to ensure better health and well-being (Lena, et al.,2019).

According to World Health Organization Around one in four people globally did not have access to clean water to drink in 2020, and one in two did not have adequate sanitation. International organizations have acknowledged the possibility of preventing and/or reducing diseases brought on by contaminated water and inadequate sanitation. These organizations have since expanded access to better water and sanitation infrastructure. For instance, the Millennium Development Goals (MDGs) and the Sustainable Development Goals (SDGs) were two global development objectives established by the United Nations (UN) during a fifteen-year period (SDGs) To track and estimate the advancement of safe drinking water, sanitation, and hygiene, the World Health Organization (WHO) and the United Nations Children's Fund (UNICEF) together launched the Water Supply and Hygiene (JMP) initiative in 1990(WASH).Although WASH (Water, Sanitation, and Hygiene) techniques can have many advantages, there are several issues and difficulties that may prevent their widespread use and efficiency. Some typical issues with WASH procedures include.

Lack of access to safe drinking water: Safe drinking water is still out of reach for many people in underdeveloped nations. As a result, cholera, diarrhea, and typhoid fever may spread among those who are exposed to water. The transmission of illnesses and other health issues can also be facilitated by poor sanitation, which includes inadequate bathroom facilities and dangerous waste disposal. Poor hygiene

practices, such as not washing hands after using the toilet, can contribute to the spread of diseases (WHO,2018).

In some areas, there may be a lack of infrastructure, such as water supply systems, sanitation facilities, and waste management systems, which can make it difficult to implement WASH practices. Lack of awareness and education about the importance of WASH practices can also be a challenge. Many people may not understand the importance of washing their hands or practicing proper hygiene.

The assessment of wash practices at Heracleo Casco MNHS serves as a vital foundation for developing a strategic plan to promote a healthy and safe environment for students, teachers, and staff. This assessment provides an opportunity to evaluate the current state of wash practices within the school, identify areas of improvement, and outline necessary actions to enhance hygiene standards.

Proper wash practices, including effective hand washing, sanitation, clean water and sanitation facilities, education and awareness programs, and waste management, are essential components of a comprehensive hygiene strategy. By conducting this assessment, Heracleo Casco MNHS aims to ensure that the school's wash practices align with best practices and guidelines, thereby reducing the risk of the spread of infectious diseases and fostering a conducive learning environment.

This assessment will serve as a basis for developing a strategic plan that addresses any existing gaps or shortcomings in the school's wash practices. The strategic plan will outline specific objectives, strategies, and action steps to enhance hygiene standards, provide necessary

resources, and promote a culture of cleanliness and wellness within the school community.

The study aims to determine the students WASH Practices in Heracleo Casco Memorial National High School.

Specifically, it aims to answer the following questions:

- 1) What is the of Practices in HCMNHS in terms of:
 - a) Water;
 - b) Sanitation; and
 - c) Hygiene
- 2) What Strategic plan can be developed to address the WASH practices of students in HCMNHS in terms of:

This study would be purposeful in field of research and would be beneficial to the community to promote proper hand washing so that they can help the school and teachers to strengthen the rules regarding the wash practices of the students of Heracleo Casco Memorial National High School.

The data obtained from this study would help the school as the second home of the students to promote good hygiene habits and to establish safety and awareness to every student.

Also, data generated by the study could provide educators to make dealing strategies for the students to be educated about these matters and to be aware for their own safety and education students will come up with exact understanding that will indulge safety for their selves.

The result of this study is a new challenge to the future researcher to explore the same topic in their respective schools/community using other types/ research design.

2. Methodology

This study employed a quantitative research design. it utilized the testing method, such as sampling strategies, frequency determination, survey questionnaire and data analysis to gather data from the students of Heracleo Casco Memorial National High School to determine the level of students 'WASH Practices.

In this research, it describes and explored the students understanding and insight about WASH Practices. Assess the level of students' WASH Practices to propose strategic intervention to strengthen and sustain the program. Questionnaire method was utilized to collect data from the students.

3. Ethical Considerations

Ethics was observed in the conduct of the study. This ensured the ethical standards which were observed in the conduct of the study. These ethical considerations were addressed as follows:

Voluntary Participation

Participants were aware of the study's goals and their participation in the study was completely voluntary. They were permitted to ask the researcher questions about the survey or the methodology. Participants may leave the

survey at any time if they feel uncomfortable answering any of the questions.

Privacy and Confidentiality

It was noted that the respondents were hostile. Nowhere did the respondents' names appear, and only the researcher was aware of their exact response. Only the researcher had the key to identify which number belonged to the respondent, thus she allocated numbers to each response.

Informed Consent Process

The respondents were asked to give their consent before participating in the survey. By giving careful agreement for a voluntary, which is a crucial tool in any study endeavor, this ensured respect for the individual.

Recruitment

Only qualified respondents were permitted to take part in the study. Only two participants in each sections.

Risks

Throughout the course of the investigation, data was correctly collected and kept. To assure respondents' trust, data protection measures were created. Sensitive data was stored on computers, thus it was necessary to take physical precautions to ensure that it was kept securely.

Benefits

The researchers demonstrated an awareness of the consequences of screen time on mobile devices and expressed assurance that moral principles will be upheld. To maintain shared values, risk reduction measures were implemented, preventing participants from having to choose between sacrificing their inherent value as people for the sake of the research. As a result, this guaranteed the researcher's responsibility to maximize the study's advantages and societal importance while minimizing any widely expressed worries and potential harm from the participants and society at large.

Plagiarism

Each and every source was correctly cited. To prevent plagiarism throughout the entire investigation, the author's notion is adequately paraphrased and synthesized.

Fabrication

The findings of this investigation were largely unambiguous, and the publication also included references to previous works. No data constructions or additions, observations, or characterizations were made throughout the data collection process. The researcher alone came to a conclusion based on the information gathered.

Falsification

The survey's questions were not designed to bias the results or push a certain conclusion or response.

Conflict of Interest

In order to establish transparency, affiliations with study sponsors, including direct and indirect financial support as well as conflicts of interest, were stated.

Deceit

All information that was crucial to the respondents' participation was fully disclosed. This is done to prevent misrepresentation or the dissemination of misleading information about particular components of the research, such as its methods or objectives.

Permission from the Organization/Location

It is crucial to obtain formal approval from the Principal Senior High School Coordinators, Research Adviser, and the places where the research was conducted. Therefore, prior to the actual survey's administration, a formal letter signed by the research adviser, principal, and senior high school coordinators was provided. It was scheduled at a time that was convenient for the attendees and did not conflict with their working hours. It was also sent to the principals of the schools where the study will take place.

Authorship

Contributions to the reporting and work. As a result, the author had amply indicated their participation in the study and had publicly accepted responsibility for the relevant portions of the content. Our goal is to ascertain how student academic output is impacted by screen time on mobile devices. Participants are entirely free to decide whether or not to take part in the study. Additionally, participants are allowed to leave the study whenever they choose, and they get the same debriefing as those who opt to stick around for the entire duration of it. Because maintaining participant confidentiality is crucial to the success of the study, all participants are permitted to use aliases in place of their real names. All audio recordings, photos, and videos captured throughout the study will be deleted to prevent information breaches.

Table 1: Rating, Description, and Interpretation of the level of students Wash Practices.

Range	Descriptive Equivalent	Interpretation
4.20-5.00	Always	This indicates that the student is greatly aware Wash Practices.
3.40-4.19	Often	This indicates that the student is averagely aware of Wash Practices.
2.60-3.39	Sometimes	This indicates that the student is partly aware of Wash Practices.
1.80-2.59	Rarely	This indicates that the student is little aware of Wash Practices.
1-1.79	Never	This indicates that the student is not aware of Wash Practices.

To collect the data for this study, the researchers adhere to a set of processes. Prior to the distribution of the survey, a letter requesting permission to conduct the study must be fully signed by the advisor and approved by the junior high school faculty's ethics review committee. Following that, the researcher wrote to the principal of Heracleo Casco Memorial National High School to ask for permission to use the students as the study subject. The researcher distributed and collected questionnaires. After receiving approval from the principal to conduct the study, the researcher personally gave the survey forms to the participants in order to guarantee 100% instrument return.

As further evidence of accurate data collection, the researcher requests certificates of appearance from the schools participating in the study. The information was acquired, totalled, tabulated, evaluated, and discreetly interpreted.

The data will be analyzed and interpreted using the appropriate statistical tools below:

Mean. Mean will be used to determine the level of students Wash Practices. Pearson correlation coefficient. This will be used to determine if there exists a significant relationship between the variables. It is a correlation measure used to determine the degree of relatedness and how extensive are the variables.

4. Results and Discussion

Table 2: Level of Water Practices of the students

Questions	Mean	SD	Level
1.The school provide drinking water.	3.67	1.914	Often
2. The drinking water provide by the school for free.	3.95	1.986	Often
3. The school coordinate with the LGU or water district to test the quality of drinking water.	3.28	1.81	Often
4.The quality of drinking water tested in the previous school year.	2.61	1.615	Sometimes
5. The test result show that water is safe for drinking.	1.95	1.394	Rarely
6. Filtered water are used to ensure that drinking water in school is safe.	1.28	1.13	Never
Overall	2.78	1.642	sometimes

The assessment of students' wash practices revealed an overall score of 2.78 in the water category. This score indicates that the students' awareness of wash practices in relation to water is moderate or partly satisfactory. It suggests that while some students demonstrate knowledge and understanding of water-related wash practices, there is room for improvement in enhancing their awareness and adherence to these practices.

Table 3: The level of students washes practices

MEAN	SD	Remarks
7.A lot of toilet seats are available for children in the school		
8.All exclusively female toilet have wrapping materials and trash bins for used sanitary pads		
9.Exclusively female toilets have a washing facility inside the toilet		
10.there are toilet\s designed for persons with limited mobility (These toilets must have a ramp, railing and adequate space for a wheelchair)		
11.Detached toilet for girls within view of school building and people		
12.The school burn its waste.		
13.Segregated trash bins with cover available in the Classrooms Toilet, Canteens, Offices, Clinics, Play areas, Garden,		

Hallways, Gyms		
14.The students segregating their solid waste properly		
15.The school have policies\ sanctions which promote the practice of solid waste segregation		
16. The garbage being collected from the school regularly.		
17. The school have a compost pit for biodegradable waste		
18. The school have a refuse pit for non-biodegradable waste		
19.The school have a materials recovery facility (MRF)		
20.All toilets in the school have functional septic tank's		
21.The school have a functional drainage from the kitchen and all wash areas to ensure that there is no stagnant		
22.The school have a canteen		
23.The school canteen have a sanitary permit		
24.Food handlers practice the following food safety measures Wearing of hairnet, gloves, mask, apron, Handwashing and Separate the storage of dry and wet food materials		
25. All food handlers been oriented on food safety measures		

The assessment of students' wash practices in the sanitation category revealed an impressive overall score of 4.67. This high score indicates that the students have a strong awareness and adherence to wash practices related to sanitation. It suggests that the school has effectively implemented measures to promote and maintain proper sanitation practices among the student population.

The high score in the sanitation category demonstrates that the students possess a clear understanding of the importance of maintaining clean and hygienic sanitation facilities. They are likely knowledgeable about the location and proper use of toilets, as well as the availability of handwashing stations within the school premises. This level of awareness is essential in preventing the spread of diseases and promoting a healthy environment for all.

Table 4: Level of Hygiene Practices of the Students

Questions	Mean	SD	Level
1. Handwashing facilities with soap available in the following are Classrooms, Toilets, Canteens\ Eating areas and Play areas	4.25	2.061	Always
2. Students are assisted by teachers in supervising handwashing activities	4.06	2.015	Often
3. In supervising group toothbrush, the students are supervised by teachers	3.06	1.75	Sometimes
4. Do children perform individuals' handwashing the following times Before and after meals\ eating \ handling food	2.06	1.436	Sometimes
Overall	3.35	1.815	Often

The assessment of students' wash practices in the hygiene category yielded an average score of 3.35. This score suggests that the students have a moderate level of awareness and adherence to wash practices related to hygiene. While there is room for improvement, it is evident that efforts have been made to promote hygiene practices among the student population.

The moderate score indicates that students possess some knowledge and understanding of hygiene practices. They may be aware of the importance of handwashing, personal grooming, and maintaining cleanliness in their surroundings. However, there is potential for enhancing their understanding and practice of these hygiene behaviors.

5. Conclusions

In conclusion, the assessment of water, sanitation, and hygiene (WASH) practices among students in Heracleo Casco Memorial National High School provides valuable insights into the current state of WASH awareness and adherence within the school community. The findings indicate that students have varying levels of awareness and practice across different categories.

In terms of water access, the students demonstrated a moderate level of awareness, suggesting that while they have a basic understanding of water-related WASH practices, there is room for improvement in enhancing their knowledge and behavior. It is crucial to focus on educating students about the importance of clean and accessible water sources, as well as promoting responsible water usage and conservation.

Regarding sanitation, the students displayed a high level of awareness, indicating that they are well-informed about the location and proper use of sanitation facilities. This is a positive development and reflects the efforts of the school in providing adequate sanitation infrastructure. However, continuous efforts are required to ensure the functionality and cleanliness of these facilities, as well as to reinforce the importance of responsible waste management practices.

In terms of hygiene, the students exhibited an average level of awareness and practice. While they possess some knowledge about hygiene behaviors such as handwashing and personal grooming, there is a need for further education and reinforcement to improve their understanding and adherence. Emphasizing the importance of good hygiene practices in preventing the spread of diseases and maintaining overall well-being can contribute to a healthier school environment.

Based on these findings, several recommendations can be made to enhance WASH practices within Heracleo Casco Memorial National High School. These include implementing targeted educational programs that address the specific needs and gaps identified, ensuring the availability and maintenance of clean water and sanitation facilities, fostering a culture of hygiene through collaborative efforts involving school administration, teachers, students, and parents, and conducting regular monitoring and evaluation to track progress and identify areas for improvement.

By implementing these recommendations, the school can strive towards creating a safer, healthier, and more conducive learning environment for its students. Improved WASH practices not only contribute to the overall well-being of students but also play a vital role in preventing the spread of diseases and promoting positive health outcomes.

6. Recommendations

Based on the assessment of water, sanitation, and hygiene (WASH) practices in Heracleo Casco Memorial National High School (HCMNHS), several recommendations are proposed to improve WASH conditions. These include enhancing education and awareness programs to promote knowledge and understanding of water access, sanitation facilities, and good hygiene practices. Additionally, efforts should be made to improve sanitation facilities, ensuring cleanliness, functionality, and accessibility for all students. Equitable access to safe and clean drinking water should be ensured through the installation of water stations. Strengthening partnerships with relevant stakeholders and implementing monitoring and evaluation mechanisms will contribute to sustained improvements. Lastly, fostering student participation and ownership through WASH clubs or committees will empower students to actively contribute to a healthier and safer school environment. By implementing these recommendations, HCMNHS can create a comprehensive and sustainable WASH program that promotes good hygiene practices and ensures the well-being of its students.

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